

## ECS/EMD Configuration Change Request

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Page(s)

|   |                               |   |   |   |  |                           |
|---|-------------------------------|---|---|---|--|---------------------------|
| <b>1. Originator</b><br>Elizabeth O. Ajayi  | <b>2. Log Date:</b><br>7/7/04 | <b>3. CCR #:</b><br>04-0349             | <b>4. Rev:</b><br>—   | <b>5. Tel:</b><br>(301) 925-0507                | <b>6. Rm #:</b><br>3000L   | <b>7. Org.</b><br>DEV/DDM |
| <b>8. CCR Title:</b> Updating the Data Model Documentation with the TOMS/Earth Probe valid.   |                               |   |   |   |  |                           |
| <b>9. Originator Signature/Date</b><br>Elizabeth O. Ajayi /s/ 7/6/04  |                               |   | <b>10. Class</b><br>II  | <b>11. Type:</b><br>CCR                         | <b>12. Need Date:</b> 07/23/2004                                   |                           |
| <b>13. CCR Sponsor Signature/Date</b><br>Arthur Cohen /s/ 7/6/04  |                               |   | <b>14. Category of Change:</b><br>Update ECS/EMD Baseline Doc   |   | <b>15. Priority:</b> (If "Emergency" fill in Block 27).<br>Routine |                           |
| <b>16. Documentation/Drawings Impacted</b> (Review and submit checklist):<br>420-EMD-001  |                               |   | <b>17. Schedule Impact:</b><br>None   |   | <b>18. CI(s) Affected:</b> ESDT, SDSRV, and DDICT                  |                           |
| <b>19. Release Affected by this Change:</b><br>6B   |                               | <b>20. Date due to Customer:</b><br>N/A |   | <b>21. Estimated Cost:</b><br>None - Under 100K |  |                           |
| <b>22. Source Reference:</b> <input checked="" type="checkbox"/> NCR (attach) <input type="checkbox"/> Action Item <input type="checkbox"/> Tech Ref. <input type="checkbox"/> GSFC <input type="checkbox"/> Other:<br>ECSed38998   |                               |   |   |   |  |                           |
| <b>23. Problem: (use additional Sheets if necessary)</b><br>The following valids need to be added to the Data Model Documentation:<br><br>PlatformLongName:<br>"Earth Probe"<br><br>(Listing continues on Additional Sheet)   |                               |   |   |   |  |                           |
| <b>24. Proposed Solution: (use additional sheets if necessary)</b><br>Request that DM post the attached sheet as an addendum to the 420-EMD-001 on the EDHS server.   |                               |   |   |   |  |                           |
| <b>25. Alternate Solution: (use additional sheets if necessary)</b><br>N/A  |                               |   |   |   |  |                           |
| <b>26. Consequences if Change(s) are not approved: (use additional sheets if necessary)</b><br>The new valids will not be documented in the Data Model Documentation. The Documentation will be inconsistent with the implementation.   |                               |   |   |   |  |                           |
| <b>27. Justification for Emergency (If Block 15 is "Emergency"):</b><br>N/A   |                               |   |   |   |  |                           |
| <b>28. Site(s) Affected:</b> <input checked="" type="checkbox"/> EDF <input type="checkbox"/> PVC <input type="checkbox"/> VATC <input type="checkbox"/> EDC <input type="checkbox"/> GSFC <input type="checkbox"/> LaRC <input type="checkbox"/> NSIDC <input type="checkbox"/> SMC <input type="checkbox"/> AK <input type="checkbox"/> JPL<br><input type="checkbox"/> EOC <input type="checkbox"/> IDG Test Cell <input type="checkbox"/> Other |                               |   |   |   |  |                           |
| <b>29. Board Comments:</b>  |                               |   |   | <b>30. Work Assigned To:</b>                    | <b>31. CCR Closed Date:</b>  |                           |
| <b>32. SCDV CCB Chair (Sign/Date):</b><br>A. Abtahi /s/ 7/8/04  |                               |   | <b>Disposition:</b> <span style="border: 1px solid red; padding: 2px;">Approved</span> App/Com. Disapproved Withdraw Fwd/ESDIS ERB<br>Fwd/ECS |   |  |                           |
| <b>33. EDF CCB Chair (Sign/Date):</b>   |                               |   | <b>Disposition:</b> Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB<br>Fwd/ECS   |   |  |                           |
| <b>34. ECS CCB Chair (Sign/Date):</b>   |                               |   | <b>Disposition:</b> Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB<br>Fwd/ESDIS   |   |  |                           |

# ADDITIONAL SHEET

**CCR #:** 04-0349    **Rev:** —    **Originator:** Elizabeth O. Ajayi

**Telephone:** 301-925-0507    **Office:** 3000L

**Title of Change:** Updating the Data Model Documentation with the TOMS/Earth Probe valid.

PlatformShortName:  
"Earth Probe"

Additional modifications to the Conceptual Data Model Diagram.  
The following corrections need to be made:

- 1) Within the Conceptual Data Model Diagram on page 2-6 Figure 2-3 Data Originator:
  - a) The Platform and Instrument tables should have a one to many relationship.
  - b) The Instrument and Sensor tables should have a one to many relationship.
  - c) The Instrument and OperationModeClass tables should have a one to many relationship with OperationModeClass dependent on Instrument.
  - d) The relationship between PlatformCharacteristic and PlatformCharacteristicValueClass should be a one to one relationship with PlatformCharacteristicValueClass dependent on PlatformCharacteristic.
  - e) The relationship between InstrumentCharacteristic and InstrumentCharacteristicValueClass should be a one to one relationship with InstrumentCharacteristicValueClass dependent on InstrumentCharacteristic.
  - f) The relationship between SensorCharacteristic and SensorCharacteristicValueClass should be a one to one relationship with SensorCharacteristicValueClass dependent on SensorCharacteristic.
- 2) Within the Conceptual Data Model Diagram on page 2-7 Figure 2-4 ECSCollection:
  - a) There should not be a direct relationship between ECSCollection and ECSPParameter.
  - b) The relationship between ECSCollection and TemporalKeywordClass should be a one to many relationship.
  - c) The relationship between AdditionalAttributes and PhysicalParameterDetails should be a one to one relationship.
- 3) Within the Conceptual Data Model Diagram on page 2-8 Figure 2-5 ECSDataGranule:
  - a) The relationship between ECSDataGranule and Browse should be a many to many relationship.
  - b) The relationship between InputGranule and ECSDataGranule should be a many to one relationship.
  - c) The relationship between QAGranule and ECSDataGranule should be a many to many relationship.
- 4) Within the Conceptual Data Model Diagram on page 2-9 Figure 2-6 LocalitySpatial:
  - a) The relationship between CoordinateSystemContainer and Spatial should be a one to one relationship with CoordinateSystemContainer dependent on Spatial.
  - b) The relationship between Spatial and SpatialDomainContainer should be a one to one relationship with SpatialDomainContainer dependent on Spatial.
  - c) The relationship between SpatialDomainContainer and VerticalSpatialDomain should be a one to many relationship with VerticalSpatialDomain dependent on SpatialDomainContainer.
  - d) The relationship between CoordinateSystemContainer and VerticalCoordinateSystemContainer should be a one to one relationship with VerticalCoordinateSystemContainer dependent on CoordinateSystemContainer.
- 5) Within the Conceptual Data Model Diagram on page 2-10 Figure 2-7 LocalityTemporal:
  - a) The TemporalType table should be taken out.
  - b) The RegularPeriodic, MultipleDateTimePeriod, SingleDateTime, and RangeDateTime tables should be child entities to the Temporal table.
- 6) Within the Conceptual Data Model Diagram on page 2-11 Figure 2-8 Contact:
  - a) There is no direct relationship between ContactOrganization and ContactPerson.
- 7) Within the Conceptual Data Model Diagram on page 2-12 Figure 2-9 DeliveredAlgorithmPackage:
  - a) The relationship between DAP and PGEGroups should be a one to many relationship with PGEGroups dependent on DAP.